This listing of claims will replace all prior versions, and listings, of claims in the application:

AND COMES IN SAME

## **LISTING OF CLAIMS:**

1. (Currently Amended) Compounds A compound of general formula (I):

#### in which wherein

R<sup>1</sup> (a) is an acyl group -CO-R11 or CN, whereby wherein R11 is a saturated, unsaturated, cyclic and/or (hetero)aromatic organic radical, especially a straight or branched alkyl chain with 1-10 C atoms or a phenyl, furan or thiophene group that is optionally substituted by the least one alkyl groups group or halogen atoms atom,

b) is a carboxylic acid ester group -CO-OR12 or a carboxylic acid amide group -CO-NR12R13 or a group -SO<sub>x</sub>-R12 with X=0, 1 or 2 or -SO<sub>2</sub>-NR12R13, whereby wherein R12 is a saturated, unsaturated, cyclic and/or (hetero)aromatic organic radical, especially a straight or branched alkyl chain with 1-10 C atoms, an aralkyl group with 7-20 C atoms, whereby wherein the aryl radical optionally can be substituted by alkyl groups or halogen atoms or is a phenyl radical that is optionally substituted by alkyl groups or halogen atoms, and R13 can be a hydrogen atom or a straight or branched alkyl chain with 1-10 C atoms,

or

- (c) is the group -A-NR14-CO-NR15R16, in which A is an alkylene group with 1-4 C atoms, especially with 1 C atom, that is optionally substituted by a  $C_1$ - $C_6$  alkyl group, a carbonyl group, an oxygen atom or the group - $SO_x$  with X=0, 1 or 2; R14 and R15, in each case independently are a hydrogen atom or a straight or branched alkyl chain with 1-10 C atoms, and R16 is a straight or branched alkyl chain with 1-10 C atoms, a cycloalkyl group with 3-10 C atoms, a cycloalkylalkyl group with 7-20 C atoms, an aralkyl group with 7-20 C atoms, whereby wherein the aryl radical optionally can be substituted by alkyl groups or halogen atoms, a phenyl group that is optionally substituted by alkyl groups or halogen atoms or a heterocyclic ring that is optionally substituted by alkyl groups or halogen atoms,
- R2 is a group -CH(R21)R22, whereby R21 is a hydrogen atom, a C<sub>1</sub>-C<sub>10</sub>-alkyl group or an optionally substituted phenyl ring and R22 is an optionally substituted phenyl ring or naphthyl ring, or a group -CH<sub>2</sub>CH(R23)R24, with R23 and R24 in the meaning of an optionally substituted phenyl ring,
- R3 and R4 in each case independently are a hydrogen atom or an alkyl group with 1-10 C atoms and R3 also can be a halogen atom,
- R5 is a group that is linked via radical Z,

in which G is -C=C-, -C=N-, -N=C-, an oxygen or sulfur atom, Z is a direct bond, an oxygen atom or a sulfur atom, the group CH-R52 or -CHR52-CH-R53-, whereby R52 and R53, independently of one another, have the meaning

of a hydrogen atom or an alkyl group and n means numbers 1 and 2, a -C $\equiv$ C-triple bond or an E- or Z-configured group -CR52=CR53- or C=CR52R53, whereby R52 and R53, independently of one another, have the meaning of a hydrogen atom or an alkyl group, L is a CH<sub>2</sub> group or an NH group, Q is a carbonyl group or -SO<sub>x</sub> group, with X = 0, 1 or 2, and R51 is an amino group that is optionally substituted by an alkyl group, or a straight or branched alkyl group that is optionally substituted by halogen atoms, hydroxyl or alkoxy groups, or a cycloalkyl group with 3-7 ring members that is optionally substituted by halogen atoms, hydroxyl or alkoxy groups,

R6 is the group CH<sub>2</sub>-N(R61)R62, whereby R61, in each case independently, is a hydrogen atom or an alkyl group, and R62 is an alkyl group or an optionally substituted aralkyl group or a heteroarylalkyl group with 7-20 C atoms, and ean mean

in any orientation; also all stereoisomers of the and a steroisomer of any of the above-mentioned structures, and salts a salt thereof with a physiologically compatible acids or bases acid or base.

#### 2. (Canceled)

3. (Currently Amended) Compounds A compound according to claim 1, wherein R1 is the group -CO-R11, wherein R11 is methyl, ethyl, i-propyl, phenyl, 2-thienyl or 2-furyl.

### 4. (Canceled)

5. (Currently Amended) Compounds A compound according to claim 1, wherein R1 is the group -CO-OR12, wherein R12 is methyl, ethyl or i-propyl.

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### 6. (Canceled)

- 7. (Currently Amended) Compounds A compound according to claim 1, wherein R2 is a 2',5'-difluorobenzyl group.
- 8. (Currently Amended) Compounds A compound according to claim 1, wherein R3 and R4 are hydrogen atoms.
- 9. (Currently Amended) Compounds A compound according to claim 1, wherein Z is a direct bond or an oxygen atom.
- 10. (Currently Amended) Compounds A compound according to claim 1, wherein G is -C = C -.

- 11. (Currently Amended) Compounds A compound according to claim 1, wherein L is an NH group.
- 12. (Currently Amended) Compounds A compound according to claim 1, wherein Q is a carbonyl group, and R51 is a C<sub>1</sub>-C<sub>6</sub> alkyl group.
- 13. (Currently Amended) Compounds A compound according to claim 1, wherein R61 is a hydrogen atom or a methyl group and/or R62 is a benzyl group.
- An antagonist of the gonadotropin-releasing hormone (GnRH), comprising a compound according to claim 1.
- 15. (Currently Amended) Use according to claim 14 A method for male birth control, for hormone therapy, for treating female subfertility and infertility, for female contraception and to combat turnors, comprising administering an effective amount of a compound according to claim 1, a stereoisomer or a salt thereof, to a patient in need thereof.
- 16. (Currently Amended) Process A process for the production of compounds of general a compound of formula (1) according to claim 1, comprising:
  - (a) By reaction of reacting a compound of general formula (2)

$$R7$$
 $R5$ 
 $W$ 
 $R1$ 
 $R3$ 
 $R2$ 
 $(2)$ 

whereby wherein R7 means a leaving group, and all other radicals have the meaning that is indicated in compound (1), with a compound of general formula (3)

### R8-N(R61)R62 (3)

whereby wherein R8 means a hydrogen atom or a metal atom, and R61 and R62 have the meanings that are indicated in compound (1),

# (b) By reaction of reacting a compound of general formula (4)

$$\begin{array}{c|c}
R9 & R1 \\
\hline
R4 & X
\end{array}$$

$$\begin{array}{c}
R1 \\
R3 & R2
\end{array}$$

$$(4)$$

in which wherein R9 is the group -OSO<sub>2</sub>C<sub>n</sub>F<sub>2n+1</sub>, a halogen atom, especially a bromine or iodine atom, or another leaving group, and all other radicals have the meaning that is indicated in compound (1), with a compound of general formula (5)

$$R10 \bigvee_{\text{A}} G Q - R51$$
 (5)

whereby wherein R10 is a group that contains a metal or a non-metal, a hydroxy or mercapto group that is optionally converted into a metal salt; the

group  $-C \equiv C-R31$  or an E- or Z-configured group -CR52 = CR53R31 or -CR31 = CR52R53, in which R31 is a group that contains a metal or a non-metal, and all other radicals have the meaning that is indicated in compound (1), with or without the involvement of a catalyst;

(c) If wherein if Y is a nitrogen atom in compound (1), by reaction of reacting a compound of general formula (6)

whereby wherein R32 means a hydrogen atom or a metal atom, and all other radicals have the meaning that is indicated in compound (1), with a compound of general formula (7)

whereby wherein R33 means a leaving group, and R2 has the meaning that is indicated in compound (1), or

(d) If if W in compound (1) is a nitrogen atom, by reaction of reacting a compound of general formula (8)

whereby wherein R32 means a hydrogen atom or a metal atom, and all other radicals have the meaning that is indicated in compound (1), with a compound of general formula (9)

R33-R1 (9)

whereby wherein R33 means a leaving group, and R1 has the meaning that is indicated in compound (1).

- 17. (New) A compound according to claim 1, wherein R1 is a phenyl, furan, or thiophene group that is optionally substituted by alkyl groups or halogen atoms.
  - 18. (New) A compound according to claim 1, wherein R16 is pyridin-2-yl.
- 19. (New) A compound according to claim 1, wherein R2 is a phenyl ring optionally substituted by fluoro.
  - 20. (New) A compound according to claim 1, wherein R2 is 2-fluorophenyl.
- 21. (New) A composition comprising a compound according to claim 1, a stereoisomer, or a salt thereof, and a pharmaceutically acceptable carrier.
  - 22. (New) A compound according to claim 1, wherein A is methylene.

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(New) A compound according to claim 1, wherein R<sup>1</sup> is a methyl, ethyl, 23. n-propyl, iso-propyl, n-, iso-, tert-butyl, n-pentyl, 2,2-dimethylpropyl or 3-methylbutyl group; an n-hexyl, n-heptyl, n-octyl, n-nonyl, n-decyl group; a phenyl group; an o-, m-, p-methyl, ethyl, propyl, or isopropylphenyl group; a 2,3-, 2,4-, 2,5-, 2,6-, 3,4-, 3,5-dimethyl or -diethylphenyl group; an o-, m-, p-fluoro-, chloro-, bromo- or iodophenyl group; a 2,3-, 2,4-, 2,5-, 2,6-, 3,4-, 3,5-, difluoro-, dichloro-, dibromo- or diodophenyl group or a naphthyl group; an unsubstituted 2- or 3-thienyl group; or a 2- or 3-furyl group; a 3-methyl-, 3-ethyl-, 3-fluoro-, 3-chloro-, 3-bromo-, 3-iodo-2-furyl- or -2-thienyl group; a 4-methyl-, 4-ethyl-, 4-fluoro-, 4-chloro-, 4-bromo-, 4-iodo-2-furyl- or 2-thienyl group; a 5-methyl-, 5-ethyl-, 5-fluoro-, 5-chloro-, 5-bromo-, 5-iodo-2-furyl or -2-thienyl group; a 2-methyl-, 2-ethyl-, 2-fluoro-, 2-chloro-, 2-bromo-, 2-iodo-3-furyl or -3-thienyl group; a 4-methyl-, 4-ethyl-, 4-fluoro-, 4-chloro-, 4-bromo-, 4-iodo-3-furyl- or -3-thienyl group; a 5-methyl-, 5-ethyl-, 5-fluoro-, 5-chloro-, 5-bromo-, 5-iodo-3-furyl- or -3-thienyl group; an unsubstituted 2-, 3- or 4-pyridyl group or a 3-methyl-, 3-ethyl-, 3-fluoro-, 3-chloro-, 3-bromo-, 3-iodo-2-pyridyl group; a 4-methyl-, 4-ethyl-, 4-fluoro-, 4-chloro-, 5-bromo-, 4-iodo-2-pyridyl group; a 5methyl-, 5-ethyl-, 5-fluoro-, 5-bromo-, 5-iodo-2-pyridyl group; a 2-methyl-, 2ethyl-, 2-fluoro-, 2-chloro-, 2-bromo-, 2-iodo-3-pyridyl group; a 4-methyl-, 4-ethyl-, 4fluoro-, 4-chloro-, 4-bromo-, 4-iodo-3-pyridyl group; a 5-methyl-, 5-ethyl-, 5-fluoro-, 5chloro-, 5-bromo-, 5-iodo-3-pyridyl group; a 2-, 4-, 5-, 6-pyrimidinyl group; or a 3-, 4-, 5-, 6pyridazinyl group or a 2- or 3-pyrazinyl group.